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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,062	11/22/2000	Charles H. Glover	GC-409	2382

7590

06/13/2003

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EXAMINER

TUDOR, HAROLD JAY

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application 09/721062	Applicant(s) Glover et al	
	Examiner Tudor H.J	Art Unit 3641	Confirmation No.

- The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address -

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- ☒ Responsive to communication(s) filed on 12/2/02 and 3/31/03
- ☒ This action is **FINAL**. ☐ This action is non-final.
- ☐ Since this application is in condition for allowance except for the formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 1-3, 39-62 is/are pending in this application.
- Of the above claim(s) 1-3 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 39-62 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved or ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are ☐ accepted or ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d) or (f).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received:

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- ☐ The translation of the foreign language provisional application has been received.
- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) \_\_\_\_\_
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Draftperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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1. Petersen has been added in view of applicants' amendments.

2. The disclosure is objected to because of the following informalities: In line 13 of page 27, --.001--should be substituted for ".0001", note claim 37. Appropriate correction is required.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 51-58 and 61 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no basis in the original disclosure for the phrase "at least about two feet beyond the point of said initial impact", in line 5 of claim 51. The phrase has an open end limit while the specification states that the cohesive lethal mass of particles is maintained up to about 6 feet, note line 5 of page 19. There

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is no basis in the original disclosure for the phrase "at least one stem member", in claim 58. The phrase implies that there can be more than one stem member, however, the specification discloses only one stem member attached to the actuator. There is no basis in the original disclosure for the phrase "at least about six feet from impact of said target", in claim 61. The phrase has an open end limit while the specification states that the core particles substantially start passing said actuator between 6 and 10 feet, note lines 3-8 of page 19.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 39-44, 47 and 51-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 39, 51 and 60 are vague and indefinite in that they do not recite the three stages of operation (1) forming a unitary structure, (2) forming an expanding body of individual particles that continue to act as a unitary structure and (3) forming within a controlled distance, a

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mass of discrete particles that rapidly lose their ability to injure, which are essential features of the invention, note lines 8-19 of page 9 and lines 1 and 2 of page 14. The phrase "configure such that", in line 1 of claims 43 and 44 does not particularly point out nor distinctly claim the specific structure of the actuator. The phrase "a distance of about three feet and within ten feet from said initial impact", in claim 47, is misleading if not inaccurate. Step © occurs at a distance of between about three feet and about 6 feet, note line 5 of page 19. The phrase "at least about two feet beyond the point of said initial impact", in line 5 of claim 51 is vague and indefinite in that it does not clearly define the upper limit of the range. There is no antecedent basis for "said hull is open end", in lines 3 and 4 of claim 56. The phrase "tapered sides", in line 1 of claim 57, is vague and indefinite in that the actuator has a tapered conical side. Claims 55 and 56 are misleading if not inaccurate in that the particles disperse and act as discrete individual non-lethal particles within the ranges of 6 feet to 10 feet, note Fig. 21. There is no antecedent basis for "said truncated conical section", in line 2 of claim 59. Claim 58 is vague and indefinite in that it is unclear how a plurality of stem members can be centrally positioned on the back surface of the actuator. The exact structure of "a gas, wave zone", in line

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2 of claim 60 is unclear. There is no antecedent basis for "said absorption zone", in line 4 of claim 60. Claim 61 is vague and indefinite in that it does not clearly define the upper limit of the range. The above are illustrative only.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 45, 46 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Davies. Davies discloses, in Figs. 8A-8C, a projectile comprising a shell having a gas seal at its rear end, a forward cavity containing a plurality of particles and an actuator 94 at the front end of the cavity in contact with the particles. Davies states that his projectile is lethal over a short distance and then becomes less lethal over distance, note line 61 of col. 2 through line 4 of col. 3. The Davies projectile will perform the claimed method.

10. Claims 45, 46 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Canon. Canon discloses a projectile comprising a shell 10 containing a plurality of particles and a liquid, and a non-fragmenting tip 20, note line 63 of col. 3 through line 4 of col. 4. The Canon projectile will perform the claimed method.

11. Claims 51 and 52, as far as they can be understood because of their indefiniteness, are rejected under 35 U.S.C. 102(b) as being anticipated by Petersen. Petersen discloses, in Figs. 5C and 6C, a projectile comprising a shell 40 containing a plurality of particles 81. Lines 53-65 of col. 6 state that the particles within the shell upon passing through and traveling a distance

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three feet past the target will disperse into a pattern. The Petersen projectile will perform the claimed method.

12. Claims 49 and 50 and claims 47 and 51-56, as far as they can be understood because of their indefiniteness, are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the characteristics of the elements of the Davies projectile to achieve a desired dispersion of the particles.

13. Claims 39-44, 60 and 61, as far as they can be understood rejected under 35 U.S.C. 103(a) as being unpatentable over Davies in view of Peddie. Davies is applied as above. However, Davies does not disclose a wad absorption zone. Peddie teaches that it is old and well known in the art to employ a wad absorption zone in a shotgun projectile to protect the projectile upon firing. To employ an absorption zone in the Davies projectile to protect the projectile during firing, as taught by Peddie, would have been obvious to one having ordinary skill in the art at the time the invention was made.



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14. Claims 49 and 50, and claims 47 and 51-56, as far as they can be understood because of their indefiniteness, are rejected under 35 U.S.C. 103(a) as being unpatentable over Canon. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the characteristics of the elements of the Canon projectile to achieve a desired dispersion of the particles.

15. Claims 39-44, 60 and 61, as far as they can be understood because of their indefiniteness, are rejected under 35 U.S.C. 103(a) as being unpatentable over Canon in view of either Turco et al or Knoster, Jr.. Canon is applied as above. However, Canon does not disclose a projectile comprising a gas seal and a wad absorption zone. Both Turco et al and Knoster, Jr. teach that it is old and well known in the art to employ a gas seal and a wad absorption zone on the rear portion of a projectile to protect the projectile upon firing. To employ a gas seal and a wad absorption zone on the rear portion of the Canon projectile to protect the projectile, as taught by either Turco et al or Knoster Jr., would have been obvious to one having ordinary skill in the art at the time the invention was made.

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16. Claims 53-55, as far as they can be understood because of their indefiniteness, are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen. Petersen is applied as above. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the characteristics of the elements of the Petersen projectile to achieve a desired dispersion of the particles.

17. Applicants' remarks have been carefully considered but are not deemed persuasive.

18. Applicants allege that the rejections based upon the Davies patent are improper because the outer shell and payload of the Davies projectile disintegrate upon impact with the particles dispersing quickly in an uncontrolled manner. Davies states that his projectile is lethal over a short distance and then becomes less lethal over distance, note line 61 of col. 2 through line 4 of col. 3. Since the projectile disclosed by Davies is substantially identical to applicants' projectile, it is incumbent upon the applicants to show that the Davies projectile will not perform the claimed method, note In re Best, 195 USPQ 430, 433 (CCPA 1977), In re King, 231 USPQ 136 (Fed. Cir. 1986), and MPEP 2112.02.

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19. Applicants allege that the rejections based upon the Canon reference are improper because the Canon projectile disintegrates immediately upon impact within the target body and does not teach passing through a barrier before the target, and having a lethality range for a predetermined distance beyond the initial impact. Since the projectile disclosed by Canon is substantially identical to applicants' projectile, it is incumbent upon the applicants to show that the Canon projectile will not perform the claimed method, note In re Best, 195 USPQ 430, 433 (CCPA 1977), In re King, 231 USPQ 136 (Fed. Cir. 1986), and MPEP 2112.02.

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire


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on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold J. Tudor, whose telephone number is (703) 306-4172.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for this Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

  
HAROLD J. TUDOR  
PRIMARY EXAMINER